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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/647,287 | 08/26/2003 | Mitsutoshi Hasegawa | 03500.017504. | 2681 |
| 5514 | 7590 | 11/01/2006 | EXAMINER | |
| FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 | | | ROSE, KIESHA L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2822 | |

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/647,287 | HASEGAWA ET AL. | |
| | Examiner | Art Unit | |
| | Kiesha L. Rose | 2822 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>8/22/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to the amendment filed 21 August 2006.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1,2 and 7-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 2 disclose a frame comprising glass, this limitation is not in the original specification and is considered new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 2 disclose the frame and metal film having an encompassing shape, it is unclear what an encompassing shape is or what the frame and metal film are encompassing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi et al. (U.S. Publication 2002/0192935) in view of Tagawa et al. (U.S. Publication 2002/0190633)

In re claim 1, Joshi discloses a semiconductor device (Fig. 1i), comprising an envelope, the envelope comprising a first substrate (10); a second substrate (a circuit substrate, Page 2, paragraph 0016) opposed to the first substrate; a frame (30) interposed between the first substrate and the second substrate, a metal (12) and a low melting point metal (35) which is positioned at a part of a face of the first substrate opposite the frame, wherein the low melting point metal is positioned between the first substrate and the frame, and wherein the low melting point metal is brought into contact with the first substrate and the metal film so as to make seal bonding of the first substrate and the frame. In regards to the envelope being maintained in a reduced pressure atmosphere this is a product by process limitation, a "*product by process*" claim is directed to the product per se, no matter how actually made, *In re Hirao and Sato et al.*, 190 USPQ 15 at 17 (CCPA 1976) (footnote 3). See also *In re Brown and Saffer*, 173 USPQ 685 (CCPA 1972); *In re Luck and Gainer*, 177 USPQ 523 (CCPA

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1973); *In re Fessmann*, 180 USPQ 324 (CCPA 1974); and *In re Marosi et al.*, 218 USPQ 289 (CAFC 1983) final product per se which must be determined in a "*product by, all of*" claim, and not the patentability of the process, and that an old or obvious product, whether claimed in "*product by process*" claims or not. Note that Applicant has the burden of proof in such cases, as the above caselaw makes clear. Even though product –by [-] process claims are limited by and defined by the process, determination of patentability is based upon the product itself. The patentability of a product does not depend on its method of production. If the product in product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product is made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted)." Joshi discloses all the limitations except for the substrate and frame to be made of glass. Whereas Tagawa discloses an imaging device (Fig. 15a) that contains a first substrate (31) made of glass and a second substrate (91) formed of glass (Page 4, Paragraph 0093) with a glass frame (51) (Page 4, paragraph 0074) formed in between. The substrate is formed of glass for a better connection to the low melting point metal that joins the frame to the substrate. (Page 2, Paragraph 0026) Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Joshi by incorporating the frame and substrates to be formed of glass for better connection to the low melting point metal that connects the substrate to the frame as taught by Tagawa.

In re claim 6, Joshi discloses a first and second substrate where the second substrate is a circuit substrate, since the second substrate is a circuit substrate and

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different devices can be formed from a circuit substrate such as a display device and image display device, the display element and image display can be formed in the envelope and a television signal can be received by the image display device. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the devices of Joshi and Tagawa by incorporating a circuit substrate that can host display device and image display devices as taught by Joshi.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi and Tagawa.

In re claim 9, Joshi and Tagawa disclose all the limitations except for the vacuum level. This limitation is a process limitation, a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao and Sato et al., 190 USPQ 15 at 17 (CCPA 1976) (footnote 3). See also In re Brown and Saffer, 173 USPQ 685 (CCPA 1972); In re Luck and Gainer, 177 USPQ 523 (CCPA 1973); In re Fessmann, 180 USPQ 324 (CCPA 1974); and In re Marosi et al., 218 USPQ 289 (CAFC 1983) final product per se which must be determined in a "product by, all of" claim, and not the patentability of the process, and that an old or obvious product, whether claimed in "product by process" claims or not. Note that Applicant has the burden of proof in such cases, as the above caselaw makes clear. Even though product-by [-] process claims are limited by and defined by the process, determination of patentability is based upon the product itself. The patentability of a product does not depend on its method of production. If the product in product-by-process claim is the

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same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product is made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted)."

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi in view of Tagawa.

In re claim 2, Joshi discloses a semiconductor device (Fig. 1i) that comprises an envelope that comprises: a first substrate (10) and a second substrate (circuit substrate (Page 2, paragraph 0016) opposed to the first substrate; a frame (30) interposed between the first substrate and the second substrate; a metal film (12); and a low melting point metal (35) which is positioned at a part of a face of the frame opposite to the first substrate, wherein the low melting point metal is positioned between the first substrate and the frame and wherein the melting point metal is brought into contact with the first substrate and the metal film so as to make seal bonding of the first substrate and the frame. In regards to the envelope being maintained in a reduced pressure atmosphere this is a product by process limitation, a "*product by process*" claim is directed to the product per se, no matter how actually made, *In re Hirao and Sato et al.*, 190 USPQ 15 at 17 (CCPA 1976) (footnote 3). See also *In re Brown and Saffer*, 173 USPQ 685 (CCPA 1972); *In re Luck and Gainer*, 177 USPQ 523 (CCPA 1973); *In re Fessmann*, 180 USPQ 324 (CCPA 1974); and *In re Marosi et al.*, 218 USPQ 289 (CAFC 1983) final product per se which must be determined in a "*product by, all of*" claim, and not the patentability of the process, and that an old or obvious product,

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whether claimed in "*product by process*" claims or not. Note that Applicant has the burden of proof in such cases, as the above caselaw makes clear. Even though product –by [-] process claims are limited by and defined by the process, determination of patentability is based upon the product itself. The patentability of a product does not depend on its method of production. If the product in product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product is made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted)." Joshi discloses all the limitations except for the substrate and frame to be made of glass. Whereas Tagawa discloses an imaging device (Fig. 15a) that contains a first substrate (31) made of glass and a second substrate (91) formed of glass (Page 4, Paragraph 0093) with a glass frame (51) (Page 4, paragraph 0074) formed in between. The substrate is formed of glass for a better connection to the low melting point metal that joins the frame to the substrate. (Page 2, Paragraph 0026) Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Joshi by incorporating the frame and substrates to be formed of glass for better connection to the low melting point metal that connects the substrate to the frame as taught by Tagawa.

In re claim 8, Joshi discloses a first and second substrate where the second substrate is a circuit substrate, since the second substrate is a circuit substrate and different devices can be formed from a circuit substrate such as a display device and image display device, the display element and image display can be formed in the envelope and a television signal can be received by the image display device. Therefore

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it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the devices of Joshi and Tagawa by incorporating a circuit substrate that can host display device and image display devices as taught by Joshi.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi and Tagawa.

In re claim10, Joshi and Tagawa disclose all the limitations except for the vacuum level. This limitation is a process limitation, a "product by process" claim is directed to the product per se, no matter how actually made, In re Hirao and Sato et al., 190 USPQ 15 at 17 (CCPA 1976) (footnote 3). See also In re Brown and Saffer, 173 USPQ 685(CCPA 1972); In re Luck and Gainer, 177 USPQ 523 (CCPA 1973); In re Fessmann, 180 USPQ 324 (CCPA 1974); and In re Marosi et al., 218 USPQ 289 (CAFC 1983) final product per se which must be determined in a "product by, all of" claim, and not the patentability of the process, and that an old or obvious product, whether claimed in "product by process" claims or not. Note that Applicant has the burden of proof in such cases, as the above caselaw makes clear. Even though product -by [-] process claims are limited by and defined by the process, determination of patentability is based upon the product itself. The patentability of a product does not depend on its method of production. If the product in product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product is made by a different process." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985)(citations omitted)."

Response to Arguments

Applicant's arguments with respect to claims 1,2 and 7-10 have been considered but are moot in view of the new ground(s) of rejection. In regards to the 112 1st rejection of new matter, applicant's response showing page 13 lines 7-18 as to where the limitation of a frame made of glass is disclosed. This page does not overcome the 112 1st new matter rejection because the disclosure only states that the underlayers have a high glass adhesion. This does not show that the frame is made of glass this is only stating that the underlayers will adhere to glass. Therefore the limitation the frame made of glass is still considered new matter and the rejection stands.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

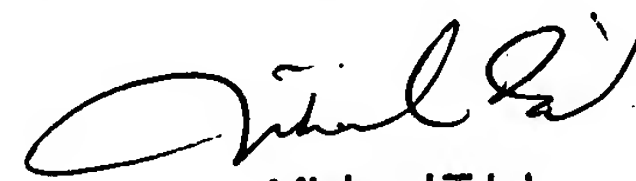
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiesha L. Rose whose telephone number is 571-272-1844. The examiner can normally be reached on T-F 8:30-6:00 off Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KLR



Michael Trinh
Primary Examiner
10/30/06